AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a system where a broadcast is output across a communications medium ~~having a fixed bandwidth~~ to individual home entertainment systems, the broadcast ~~included~~ including a plurality of channels of viewable moving image data, a method for optimizing the ~~use of the fixed bandwidth~~ quality of the broadcast by dynamically restructuring the broadcasting of the plurality of channels based on feedback from at least some of the home entertainment systems, the method comprising the steps for:

upon the occurrence of an event at a first home entertainment system, initiating usage tracking for a selected type of viewable moving image data usage for viewable moving image data of a selected channel, the selected type of viewable moving image data usage being selected from among a plurality of different types of viewable moving image data usage that can be tracked each time one of the plurality of different types of viewable moving image data usage are utilized at the first home entertainment system;

in response to the event, tracking a utilization of the selected type of viewable moving image data usage, from among the plurality of different types of viewable moving image data usage, for the moving image data at the first home entertainment system by generating user behavior information to indicate that the selected type of viewable moving image data usage is utilized;

coupling the event with the generated user behavior information for the first home entertainment system;

combining the event and the generated user behavior information from the first home entertainment system with events and corresponding generated user behavior information from other home entertainment systems, the other home entertainment systems also utilizing a type of viewable moving image data usage selected from among the plurality of different types of viewable moving image data usage for the selected channel, wherein the other home entertainment centers also track each time one of the plurality of different types of viewable moving image data usage is utilized in response to a corresponding event; and

dynamically restructuring the broadcast of at least the selected channel, by at least restructuring the viewable moving image data of the selected channel~~, and without having to change allocated bandwidth to said selected channel,~~ based on the different types of viewable moving image data usage indicated in the combined events and generated user behavior information so as to optimize the ~~use of the fixed bandwidth~~ quality of the broadcast, the restructuring increasing the quality of the broadcast by:

reassigning the channel from a first transponder of a satellite television system to a second transponder of the satellite television system, the second transponder having a greater detected amount of available bandwidth, in response to the tracked utilization and generated user behavior such that available bandwidth on the second transponder is allocated to the channel with a larger perceived user participation; and

dynamically increasing the bandwidth allocated to the selected channel, such that the signal strength of the selected channel is increased proportional to the actual detected viewing audience of the selected channel.

2. (Previously Presented) A method as recited in claim 1, wherein the combined user behavior information is anonymous such that the identities of the first home entertainment system and the other home entertainment systems are not disclosed.

3. (Original) A method as recited in claim 1, wherein said step for dynamically restructuring a broadcast is performed automatically.

4. (Previously Presented) A method as recited in claim 1, wherein said step for dynamically restructuring comprises at least one of:

modifying bandwidth of the broadcast;

interrupting the broadcast by allocating no bandwidth to the channel so as to entirely shut off the channel; and

reserving a guaranteed amount of bandwidth for the broadcast.

5. (Previously Presented) A method as recited in claim 1, further comprising the step for transmitting the coupled event and generated user behavior information for the first

home entertainment system as feedback across a back channel from the first home entertainment system to a signal source, wherein the coupled event and generated user behavior information is transmitted in one of real time and a deferred basis with respect to the broadcast of the channel.

6. (Previously Presented) A method as recited in claim 5, wherein a statistical analysis is performed at the signal source to determine when a statistically significant number of home entertainment systems have transmitted generated user behavior information.

7. (Previously Presented) A method as recited in claim 1, further comprising the step for transmitting the coupled event and generated user behavior information as feedback across a back channel from the first home entertainment system to a clearinghouse system, wherein the generated user information is transmitted in at least one of (i) real time with respect to the broadcast of the channel and (ii) on a deferred basis with respect to the broadcast of the channel.

8. (Original) A method as recited in claim 7, wherein the clearinghouse system performs said step for combining.

9. (Previously Presented) A method as recited in claim 8, wherein a statistical analysis is performed at the clearinghouse system to determine when a statistically significant number of home entertainment systems have transmitted generated user behavior information.

10. (Previously Presented) A method as recited in claim 9, wherein the clearinghouse system processes the combined events and generated user behavior information and forwards the results to a signal source.

11. (Previously Presented) A method as recited in claim 10, wherein the processing performed at the clearinghouse system comprises associating the combined events and generated user behavior information with data from a data source.

12. (Original) A method as recited in claim 11, wherein the data source comprises an electronic programming guide that provides data as to at least one of a program and an advertisement.

13. (Original) A method as recited in claim 10, wherein the processing performed at the clearinghouse system comprises generating a profile of at least one of the home entertainment systems and the users.

14. (Original) A method as recited in claim 13, wherein the profile includes the programs of the broadcast to which the home entertainment systems are more frequently tuned compared to other programs of the broadcast.

15. (Original) A method as recited in claim 14, further comprising allocating increased bandwidth to the programs more frequently tuned.

16. (Original) A method as recited in claim 15, wherein the bandwidth is increased at an instant in time prior to the airing of the programs more frequently tuned.

17. (Original) A method as recited in claim 14, further comprising allocating increased bandwidth to channels of the broadcast to which the home entertainment systems are more frequently tuned.

18. (Currently Amended) In a system where a broadcast is output across a communications medium ~~having a fixed bandwidth~~ and is received by one or more individual home entertainment systems, the broadcast including a plurality of channels of viewable moving image data, a method for restructuring the broadcast based on feedback transmitted from the one or more home entertainment systems across one or more potentially unreliable back channels to a clearinghouse system, the method comprising the acts of:

receiving at the clearinghouse system an event and coupled user behavior information across a first communication link from a first home entertainment system, wherein the event was used to initiate tracking of a selected type viewable moving image data usage for viewable moving image data of a selected channel, the selected type of viewable moving image data usage at the first home entertainment system being selected from among a plurality of different types of viewable moving image data usage that can be tracked each time one of the plurality of different types of viewable moving image data usage is utilized at the first home entertainment system;

receiving at the clearinghouse system other events and coupled user behavior information across other communication links from other home entertainment systems, wherein the events were used to initiate tracking of selected types of viewable moving image data usage for the viewable moving image data at the other home entertainment systems, the selected types of viewable moving image data usage at the other home entertainment systems being selected from among the plurality of different types of viewable moving image data usage that can be tracked;

combining at the clearinghouse system the event and coupled user behavior information from the first home entertainment system with the events and coupled user behavior information from the other home entertainment systems, the combined events and coupled user behavior information indicating the different types of viewable moving image data usage being utilized in the system for the viewable moving image data; and

automatically restructuring the broadcast of at least the selected channel, by at least restructuring the viewable moving image data~~, and without having to change allocated bandwidth to said selected channel,~~ based on analyzing the combined events and coupled user behavior information indicating the different types of viewable moving image data usage utilized in the system for the viewable moving image data, the restructuring increasing the quality of the broadcast by:

reassigning the channel from a first transponder of a satellite television system to a second transponder of the satellite television system, the second transponder having a greater detected amount of available bandwidth, in response to the tracked utilization and generated user behavior such that available bandwidth on the second transponder is allocated to the channel with a larger perceived user participation; and

dynamically increasing the bandwidth allocated to the selected channel, such that the signal strength of the selected channel is increased proportional to the actual detected viewing audience of the selected channel.

19. (Original) A method as recited in claim 18, wherein the first communication link and the other communication links are each back channels.

20. (Previously Presented) A method as recited in claim 19, further comprising the act of statistically determining at the clearinghouse system the reliability of the combined user behavior information, wherein said act of automatically restructuring a broadcast is based on the statistical determination performed at the clearinghouse system.

21. (Previously Presented) A method as recited in claim 20, wherein the statistical determination performed at the clearinghouse system comprises determining when a statistically significant amount of user behavior information has been received to cause the broadcast to be automatically restructured.

22. (Cancelled).

23. (Original) A method as recited in claim 19, wherein said act of automatically restructuring a broadcast comprises allocating varying amounts of bandwidth of an MPEG data stream to the channel.

24. (Currently Amended) In a system where a broadcast is provided from a signal source across a communications medium ~~having a fixed bandwidth~~ and is received by one or more individual home entertainment systems, the broadcast including a plurality of channels having viewable moving image data, a method for optimizing the bandwidth by restructuring the broadcasting of one or more channels within the broadcast based on feedback transmitted from the one or more home entertainment systems to the signal source across one or more back channels, the method comprising the acts of:

transmitting a broadcast from a signal source to one or more home entertainment systems;

receiving at the signal source an event and coupled user behavior information across a first back channel from a first home entertainment system, wherein the event was used to initiate tracking of viewable moving image data usage of viewable moving image data for a selected channel, the selected type of viewable moving image data usage at the first home entertainment system being selected from among a plurality of different types of viewable moving image data usage that can be tracked each time one of the plurality of different types of viewable moving image data usage is utilized at the first home entertainment system;

receiving at the signal source other events and coupled user behavior information across other back channels from other home entertainment systems, wherein the events were used to initiate tracking of selected types of viewable moving image data usage at the other home entertainment systems, the selected types of viewable moving image data usage at the other home entertainment systems being selected from among the plurality of different types of viewable moving image data usage that can be tracked;

combining the event and coupled user behavior information from the first home entertainment system with the events and coupled user behavior information from the other home entertainment systems, the combined events and coupled user behavior information indicating the different types of viewable moving image data usage being utilized in the system for the viewable moving image data; and

automatically restructuring a broadcast of the selected channel, by at least restructuring the viewable moving image data~~, and without having to change the allocated bandwidth to said selected channel,~~ based on analyzing the combined events and coupled user behavior information

indicating the different types of viewable moving image data usage utilized in the system for the viewable moving image data, the restructuring increasing the quality of the broadcast by:

reassigning the channel from a first transponder of a satellite television system to a second transponder of the satellite television system, the second transponder having a greater detected amount of available bandwidth, in response to the tracked utilization and generated user behavior such that available bandwidth on the second transponder is allocated to the channel with a larger perceived user participation; and

dynamically increasing the bandwidth allocated to the selected channel, such that the signal strength of the selected channel is increased proportional to the actual detected viewing audience of the selected channel.

25. (Previously Presented) A method as recited in claim 24, wherein the user behavior information is received in real time across the first communication link with respect to a program broadcast on the selected channel.

26. (Previously Presented) A method as recited in claim 24, wherein the user behavior information is received on a deferred basis across the first communication link with respect to a program broadcast on the selected channel.

27. (Currently Amended) In a broadcast system, a computer program product for implementing a method for restructuring a broadcast based on feedback, wherein the broadcast originates from a signal source and is receivable by one or more of a plurality of home entertainment systems, the broadcast including a plurality of channels of viewable moving image data, the computer program product comprising:

a computer readable medium carrying computer program code means utilized to implement the method, wherein the computer program code means comprises executable code for implementing the acts of:

receiving at a clearinghouse system an event and coupled user behavior information across a first communication link from a first home entertainment system, wherein the event was used to initiate tracking of a selected type viewable moving image data usage for viewable moving image data of a selected channel, the selected type of viewable moving image data usage at the first home entertainment system being selected from among a plurality of different types of viewable moving image data usage that can be tracked each time one of the plurality of different types of viewable moving image data usage is utilized at the first home entertainment system receiving at the clearinghouse system other events and coupled user behavior information across other communication links from other home entertainment systems, the events were used to initiate tracking of selected types of viewable moveable image data usage at the other home entertainment systems, the selected types of viewable moving image data usage at the other home entertainment systems being selected from among the plurality of different types of viewable moving image data usage that can be tracked;

combining the event and coupled user behavior information from the first home entertainment system with the events and coupled user behavior information from the other home entertainment systems, the combined events and coupled user behavior information indicating the different types of viewable moving image data usage being utilized for the viewable moving image data in the broadcast system; and

automatically restructuring the broadcast of the selected channel, by at least restructuring the viewable moving image data~~, and without having to change the allocated bandwidth to said selected channel,~~ based on analyzing the combined events and coupled user behavior information indicating the different types of viewable moving image data usage utilized in the system for the viewable moving image data, the restructuring increasing the quality of the broadcast by:

reassigning the channel from a first transponder of a satellite television system to a second transponder of the satellite television system, the second transponder having a greater detected amount of available bandwidth, in response to the tracked utilization and generated user behavior such that available bandwidth on the second transponder is allocated to the channel with a larger perceived user participation; and

dynamically increasing the bandwidth allocated to the selected channel, such that the signal strength of the selected channel is increased proportional to the actual detected viewing audience of the selected channel.

28. (Original) A computer program product as recited in claim 27, wherein said first communication link and said other communication links are each back channels.

29. (Previously Presented) A computer program product as recited in claim 28, wherein the user behavior information is received in real time with respect to a program broadcast on the selected channel.

30. (Previously Presented) A computer program product as recited in claim 28, wherein the user behavior information is received on a deferred basis with respect to a program broadcast on the selected channel.

31-36. (Cancelled).

37. (Previously Presented) The method as recited in claim 1, wherein the step for initiating usage tracking for a selected type of viewable moving image data usage for viewable moving image data of a selected channel comprises an a step for initiating usage tracking for selected type of viewable moving image data usage selected from among outputting the viewable moving image data and recording the viewable moving image.

38. (Previously Presented) The method as recited in claim 37, wherein the step for initiating usage tracking for a selected type of viewable moving image data usage selected from among viewing the viewable moving image data and recording the viewable moving image comprises a step for initiating usage tracking for recording the viewable moving image data.

39. (Previously Presented) The method as recited in claim 1, wherein the step for tracking utilization of a selected type of viewable moving image data usage for the viewable moving image data comprises a step for tracking utilization of recording the viewable moving image data.

40. (Previously Presented) The method as recited in claim 1, wherein the step for combining the event and the generated user behavior information from the first home entertainment system with events and corresponding generated user behavior information from other home entertainment systems comprises an step for combining a first event and generated user behavior information indicating the viewable moving image data is being recording with a second event and generated user behavior information indicating the viewable moving image data is being output.

41. (Previously Presented) The method as recited in claim 1, wherein the step for dynamically restructuring the broadcast of at least the selected channel comprises a strep for restructuring the broadcast based on the combined events and generated user behavior information indicating that at least one home entertainment system is recording the viewable

moving image data and at least one home entertainment system is outputting the viewable moving image data.

42. (Previously Presented) The method as recited in claim 1, wherein the step for initiating usage tracking for a selected type of viewable moving image data usage for viewable moving image data of a selected channel comprises an a step for initiating usage tracking for a selected type of viewable moving image data usage that indicates how the viewable moving image data is being used.

43. (New) The method as recited in claim 6, further comprising delaying increasing the bandwidth allocated to the selected channel until a statistically significant number of home entertainment systems have transmitted generated user behavior information.

44. (New) The method of claim 1, wherein the viewable moving image data broadcast in the selected channel is broadcast in analog form.

45. (New) The method of claim 1, wherein the tracked moving image data usage includes a description of a program being broadcast on the selected channel.

46. (New) The method of claim 1, wherein the increased bandwidth for the selected channel enables user interaction along with the broadcast of the viewable moving image data.

47. (New) In a system where a broadcast is output across a communications medium to individual home entertainment systems, the broadcast including a plurality of channels of viewable moving image data, a method for minimizing disruption of a broadcast based on feedback from at least some of the home entertainment systems, the method comprising the steps for:

upon the occurrence of an event at a first home entertainment system, initiating usage tracking for a selected type of viewable moving image data usage for viewable moving image data of a selected channel, the selected type of viewable moving image data usage being selected from among a plurality of different types of viewable moving image data usage that can be tracked each time one of the plurality of different types of viewable moving image data usage are utilized at the first home entertainment system;

in response to the event, tracking a utilization of the selected type of viewable moving image data usage, from among the plurality of different types of viewable moving image data usage, for the moving image data at the first home entertainment system by generating user behavior information to indicate that the selected type of viewable moving image data usage is utilized;

coupling the event with the generated user behavior information for the first home entertainment system;

combining the event and the generated user behavior information from the first home entertainment system with events and corresponding generated user behavior information from other home entertainment systems, the other home entertainment systems also utilizing a type of viewable moving image data usage selected from among the plurality of different types of viewable moving image data usage for the selected channel, wherein the other home entertainment centers also track each time one of the plurality of different types of viewable moving image data usage is utilized in response to a corresponding event;

based on the combined event and generated user behavior information, determining an optimal time to disrupt programming on the selected channel such that a minimal number of users are affected by the disruption; and

shutting down the viewable moving image data broadcast on the selected channel during the determined optimal time.